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ABSTRACT

This study adopted a social cognitive approach to examine the association between academic delay of gratification and students' rating of teachers and course effectiveness. Also investigated were the motivational tendencies of students and teacher and classroom characteristics that served to clarify the association. Participants were 113 college students in introductory psychology, statistics, and political science courses. Some analyses were conducted with a subgroup for whom final course grades were available. Findings suggest that academic delay of gratification, which was conceptualized as a self-regulatory learning strategy, was positively and significantly correlated to students' rating of the course and teaching effectiveness. It was also found that academic delay of gratification was a significant predictor of students' rating of the instructors. Delay of gratification was a significant and positive predictor of students' final course grades also which proved to be true even when researchers controlled for the effect of rating of the instructor and rating of the course. These findings are discussed in the context of B. Zimmerman's cyclical model of self-regulation. Implications for education and future research are discussed. Two appendixes contain some sample items from the academic delay of gratification measure. (Contains 3 tables and 27 references.) (SLD)

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ED 455 277

Running head: Academic Delay of Gratification

Teaching Effectiveness and Course Evaluation: The Role of Academic Delay of Gratification

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Abstract

Adopting a social cognitive approach, in the present study, we examined the association between academic delay of gratification and students rating of teachers and course effectiveness. We also sought to investigate which students' motivational tendencies and teachers and classroom's characteristics serve to clarify those associations. In the present study, we found partial support for our theoretical contentions. We found that academic delay of gratification, which we conceptualize as self-regulatory learning strategy, was positively and significantly correlated to students rating of the course and teaching effectiveness. We also found that academic delay of gratification was a significant predictor of students rating of the instructors. Delay of gratification was a significant and positive predictor of the students' final course grade, that is the case even when we controlled for the effect of rating of the instructor and rating of the course. These finding are discussed within Zimmerman's cyclical model of self-regulation. Implications for education and future research are discussed.

Teaching Effectiveness and Course Evaluation: The Role of Academic Delay of Gratification

One of the primary roles of teachers is to motivate their students to self-regulate their learning process and to maintain self-directed goals in order to secure high academic achievement. In this view, teachers are called to create in the classroom an environment in which the students could become motivationally and behaviorally active to ensure mastering of learning and task completion. This call to teachers was made by William James as early as in the 1890. James (1890) invited teachers to "work your pupil into such a state of interest in what you are going to teach him that every other object of attention is banished from his mind" (p. 24-23). Obviously, James was concerned with the role and effectiveness of the teachers, the environment in which learning take place, and the action and reaction of the learners. James knew that learning encompasses three major factors: teacher effectiveness, the way in which instruction is transmitted (i.e., course effectiveness and organization), and the individual characteristics of the learners.

In James' call to teachers, it is implicit that teachers should be effective dispensers of knowledge, but also that they should care about the motivation of the students. If the students are not actively motivated to learn, learning will not happen. James asked the teachers to work on the students' interest for the content of learning. He asked teachers to involve the students in the classroom activities so the learners could be absorbed and submerged into what is happening in the classroom. This call however, also suggests the kind of classroom setting that is conducive for learning to happen. That is one in which there is no distraction and the only sole interest is the task on hand.

James appealed as what would happen to learners when teachers and instructions are effective. James contended that when teachers are effective, particularly by motivating the learners to be interested in the classroom activities, and when classes are effective, learners would be absorbed in the task in so a way that every other distraction and competing alternative will go away. The students themselves would banish the distracting factors. In other words, James believed that there is an association between teaching, course content, and the students' volitional control. Indeed, James was one of the first theorists to discuss the role of volition in understanding individual differences in enacting long-term intentions (James, 1890).

Although much research have been done assessing teachers effectiveness in imparting knowledge, very little work has been done to examine the association between teaching and course effectiveness and learners' ability to control their volition and engagement in self-regulation of behavior to secure mastering of class material and task completion. That is why the purpose of the present study was to examine what is the association between students' perception of teaching and course effectiveness and their willingness to engage in self-regulatory behavior. The index of students' classroom-related self-regulation was the students' willingness to delay gratification for the sake of temporarily distant but highly valuable academic outcomes. A highly motivated learner would delay gratification because they are interested in the classroom activities. Teachers work hard to involve the students in learning. At the same time, students who delay gratification contribute significantly to their class with their high motivation, effort, and commitment to their task. What the teachers contribute and bring to the class is indeed what the students who delay gratification would bring and contribute to the class,

too. Therefore, a positive association is expected between students' willingness to delay gratification and their rating of teaching and course effectiveness.

The previous discussion suggests that learners who engage in delay of gratification could be like those described by James (1890). However, if the students do not perceive that the teaching and the course are useful, important, and interesting to them, then they would not enact delay of gratification. That is precisely what Mischel and his associates posited (Mischel, 1996; Mischel, Canton, & Feldman, 1996). They maintained that individuals would choose to delay gratification for a reward or goal that they consider highly valuable, and useful. Otherwise, they would not delay gratification. That is why in the present study, motivational determinants of delay of gratification were examined.

Further, Mischel and his associates posited that individuals who are willing to delay gratification for a longer time are those who engage in attention control and self-instruction during a delay situation (Mischel, 1996). That is, they enact intentions by cognitively and behaviorally transforming and adapting an adverse situation into a pleasant or manageable environment. It is our contention that learners who are willing to delay gratification would activate their cognition and enhance their motivation to concentrate and be focused during class activities that are distracting even when the professor is less effective or the course processes are less desirable. They would activate their volitional control at the point that eventually they would satisfactorily and positively engage in class activities and may eventually perceive the teachers as more effective than the students who are unwilling to delay gratification because the outcome of their

volitional control and delay of gratification would be high academic achievement such as high course grade.

We further argue that high self-regulated learners may use their volitional control to delay gratification, which could result is a favorable view of the teachers and the class tasks. They would develop a positive view of class activities because they have successfully orchestrated their motivational tendencies, cognitive skills, and behavioral capabilities. At the same time, teachers would respond positively to their effort resulting in a positive relationship between the teachers and these students that could go beyond the classroom is encounters such as those during teachers' office hours.

This type of relationship may produce a cyclical or circular relationship in which teachers, who respond to James' (1890) call, would put their students in "a state of interest…and devouring curiosity" (p. 24-25). As Gallangher (1994) put it "the teacher is now expected to create enriched learning environments, to design student interactive activities, and to be aware of the specific content he/she is expected to present—all while being reflective on his/her role in the interactive and sequential process" (p. 182). This type of approach of teaching is what McKeachie (1974) called "student-centered teaching" (p. 176), which he contrasted with the teacher-centered teaching. The student-centered teaching approach calls for "higher level cognitive goals and for motivational and attitudinal changes" (p. 176) among learners with the assistance of teachers. While teachers are called upon to focus their attention on the students, students are also call to focus their attention on task. That is why, concomitantly, students with high willingness to postpone delay of gratification would "banish from their mind" distracting alternatives

in order to achieve long-term academic goals; this cyclical interaction would produce an interaction that would highly benefit all learners, teachers, and administrators.

In the literature, there is a constellation of learning strategies known to be effective in enhancing learning and academic achievement (McCann & Garcia, 1999; Pintrich, 2000; Pintrich & De Groot; Corno, 1993; Randi & Corno; 2000; Wolters, 1999; Zimmerman & Martinez-Pons, 1990). Recently, Bembenutty and his associates (Bembenutty, 1999; Bembenutty & Karabenick, 1998; Bembenutty, Karabenick, McKeachie, & Lin, 1998) have suggested that students strategically delay gratification by voluntarily postponing immediate gratification in order to enact academic rewards temporarily distant but highly valuable. The research posited that delay of gratification is a learning strategy in a similar line as it is self-monitoring, effort regulation, and help seeking. They maintain that students' willingness to delay gratification influences learning. From this perspective, delay of gratification refers to students' preference for an immediately available option (e.g., go to a favorite concert the day before a test even though the student is not well-prepared) or a delayed alternative (e.g., stay home studying to get later a good grade in the course) to secure temporarily distant academic rewards, goals, and intentions (Bembenutty, 1999; Bembenutty, 1999). Indeed, to emphasize the academic content-specificity of delay behavior, they called this strategy academic delay of gratification.

Academic delay of gratification is assessed by the Academic Delay of Gratification Scale (ADOGS; Bembenutty & Karabenick, 1998). The ADOGS assesses students' delay preference for an immediately available attractive option versus a delayed alternative. An example (see Appendix A) is, "Delay studying for an exam in this class the next day even

though it may mean getting a lower grade, in order to attend a concert, play, or sporting event," versus "Stay home to study to increase your chances of getting a high grade on the exam." Students responded on a four-point scale.

In a series of studies, Bembenutty and Karabenick (1998) and Bembenutty, Karabenick, McKeachie, and Lin (1998) using the ADOGS found an association between students' tendencies to use cognitive (e.g., retrieval, distributed practice, rehearsal, elaboration, organization) and self-management strategies (e.g., effort regulation, action control, time management, environmental control, peer learning) and their willingness to delay gratification. They also found a significant correlation between academic delay of gratification and students motivational tendencies (e.g., self-efficacy, task-value, intrinsic and extrinsic motivation). The aforementioned patterns of behavior suggest that delay of gratification is an important individual difference, which is enacted in relation to academic and classroom activities. In other words, students who are willing to delay gratification for the sake of future academic rewards appear to perceive classroom-related task in a more favorable way than students who are unwilling to delay gratification. That is why we are expecting a positive association between students' willingness to delay gratification and their rating of the course and teaching effectiveness.

These associations, we suggest, represent a cyclical self-regulated process of learning, which is consistent with Zimmerman's cyclical model of self-regulation. Zimmerman (1998, 2000) proposed that self-regulation is a cyclical process in which learners set goals, monitoring their progress, and reflect about their performance interactively. Zimmerman's model suggests that learning is maintained through a cycle of self-regulatory processes that must be monitored during task performance. According

to Zimmerman (2000), self-regulation involves three-phases. The forethought phases (pre-performance) includes processes that set the stage for action. The forethought phase includes goal setting, strategic planning, self-efficacy beliefs, and intrinsic interest. The performance phase (during performance) includes the processes that affect attention and action. The performance phase includes attention focusing, self-instruction, and self-monitoring. The self-reflection phase (post-performance) includes learners' responses to their efforts. Examples of the self-reflection phase are self-evaluation, attributions, self-reactions, and adaptivity. From this view, students' perception of the teaching and course effectiveness would be determined firstly by their motivational tendencies, goal-setting, and strategic planning (forethought phase; motivation toward the course, interest and value of the class and utility of the course material), secondly, by their attention control, self-imposed delay of gratification, and self-monitoring of strategies (performance phase), and thirdly, by the way in which they self-evaluate their academic progress and their reaction and attribution about that progress (self-reflection phase).

In sum, the two major purposes of the current study were:

1. to examine the association between students' willingness to delay gratification and their rating of teachers and their courses.
2. to investigate which were the students' characteristics that significantly predicted their perception of the course and teaching effectiveness, their final course grade.

Method

Participants

Participants were college students (N = 113) enrolled in undergraduate introductory psychology, statistics, and political science course at a large, public, Midwestern university. The students' final course grades were not available for 34 out of the 113, which constituted two entire courses. Thus, some of the analyses were conducted with a subgroup of the students for which final course grades were available. In the subgroup, there were 79 students; 48 females and 31 males. Eleven of the students were first year college students, 23 were sophomores, 19 were juniors, 14 were seniors, and 7 were graduate students. Fifty-one of the participants were Caucasians and 27 were members of different minority groups. One student did not report her ethnicity. The data was collected after the mid-semester examination and at least two weeks before the final examination.

Measures

Academic Delay of Gratification. In this study, ten scenarios from the Academic Delay of Gratification Scale (ADOGS; Bembenutty & Karabenick, 1998), were used. The ADOGS has an internal consistency Cronbach $\alpha = .72$ ($M = 2.93$, $SD = .71$). The ADOG examines students' delay of gratification preference in relation to the math course in which they were currently enrolled. The students rated their preference for an immediately available attractive option versus a delayed alternative. An example (see Appendix A) is, A, "Delay studying for an exam in this class the next day even though it may mean getting a lower grade, in order to attend a concert, play, or sporting event," versus, B, "Stay home to study to increase your chances of getting a high grade on the exam." Students

responded on a four-point scale: Definitely choose A, Probably choose A, Probably choose B, and Definitely choose B. Considered as continuous variables, responses were coded and added for the three items so that higher total scores indicated greater delay of gratification (range 1 to 4).

Determinants of Academic Delay of Gratification. After the students have reported their choice for each scenario presented in the ADOGS, they reported their interest in the delay versus the non-delay alternatives (*Interest*). They also indicated important were for them the delay alternatives versus the non-delay alternatives (*Importance*). In addition, they reported how useful were for them the delay alternatives versus the non-delay alternatives (*Utility*). Differences scores (delay preference minus preference for an immediately-available attractive option) were obtained by subtracting responses to the non-delay alternatives from the delay alternatives. Then, the results of the subtractions were added over the ten items (see Appendix A).

Rating of the Instructors. To assess the students' perception of teaching effectiveness, they responded to the following question: "What is your overall rating of the teaching effectiveness of the instructor of this course?" The alternative answers ranging from 1 to 5, "Much above average" to "Much below the average" (recoded variable; see Appendix B).

Rating of the Course. To assess the students' perception of the course effectiveness, they responded to the following question: "What is your overall rating of this course?" The alternative answers ranged from 0 to 5, "Much above average" to "Much below the average" (recoded variable; see Appendix B).

Demographic information. Demographic information, which included gender, age, and ethnicity, were obtained. In addition, the students reported their class level and the name of their classes and the name of their classes.

Students' expected final course grade. The students reported their expected final course grade. The scale ranges from 0 (failing) to 11 (an A).

Students' final course grade. The students gave permission to obtain from their instructor their final course grade in the course. The scale ranges from 0 (failing) to 11 (an A).

Results

Correlations Between the Variables

The first purpose of the study was to examine the association between students' willingness to delay gratification and their rating of teachers and their courses. As Table 1 shows, using the entire group (N = 113), academic delay of gratification was significantly related to students' rating of the course (r = .23) and teaching effectiveness (r = .21). Student's rating of the course and teaching effectiveness were highly related (r = .72). Delay of gratification was related to students' expected and final course grade (r = .34), but marginally related to expected course grade (r = .17). Teaching effectiveness was related to students' expected (r = .33), and final course grade (r = .25.) Students' rating of the course was related to students' expected (r = .33) and final course grade (r = .35).

With sample of 79 students, academic delay of gratification was marginally correlated to students' rating of the course (r = .21, p < .10), but it was not associated with rating of the instructor (see Table 2). Further, delay of gratification was related to students'

expected final course grade ($r = .19$, $p < .10$) and actual final grade in the course ($r = .34$, $p < .10$). These results show that indeed the students who have greater preference for deferment of gratification obtained higher grades in the course while students' unwilling to postpone impulses failed to obtain high grades. Delay was also positively related to the age of the student ($r = .29$, $p < .05$), which indicates that older students tend to have higher preference for delay of gratification.

Rating of the instructor was highly correlated to rating of the course ($r = .68$, $p < .001$). Further, rating of the instructor was significantly related to expected ($r = .29$, $p < .05$) and to final course grade ($r = .34$, $p < .05$). Similarly, rating of the course was correlated to expected course grade ($r = .35$, $p < .05$), obtained final course grade ($r = .32$, $p < .05$), and to importance of the delay alternatives relative to the non-delay alternatives ($r = .28$, $p < .05$).

Interest, importance and utility of the delay alternatives relative to the non-delay alternatives were related to the students' willingness for delay of gratification. In addition, importance of the delay alternatives was positively related to final course grade ($r = .24$, $p < .05$). Final course grade was highly related to expected course grade ($r = .85$, $p < .001$), to delay of gratification and to age of the students ($r = .27$, $p < .05$).

Hierarchical Regression Analyses

The second purpose of the study was to investigate which were the students' characteristics that significantly predicted their perception of the course and teaching effectiveness, their final course grade. We conducted a series of hierarchical regression analyses to examine the multivariate relations among the variables in the present study.

Table 3 displays the results of the regression analyses (β weights) and the R^2 values. We entered the variables in two steps. In the first steps, we first entered delay of gratification and its motivational determinants. In the second step, we entered again delay of gratification and its determinants, and added the students rating of the instructor and the course and their expected and obtained course grade. The three dependent variables were course evaluation, instructor evaluation, and final course grade.

As Table 3 shows, in the first regression analysis, course evaluation was the dependent variable. In the first step, we entered delay of gratification and its motivational determinants (*interest, importance, and utility*) as the predictors. None of the variables were significant predictors of course evaluation. The R^2 value associated with these variables was .13. In the second step, we added rating of the instructor, the expected, and obtained final course grade. Rating of the instructor was the only significant predictor of rating of the course ($\beta = .59$, $p < .001$) and added a further 38% to the variance ($R^2 = .51$).

In the second regression analysis, instructor evaluation was the dependent variable. In the first step, we entered delay of gratification and its motivational determinants as the predictors. Academic delay of gratification was the only variables that significantly predicted instructor evaluation ($\beta = .31$, $p < .05$). The R^2 value associated with these variables was .10. In the second step, we added rating of the course, the expected, and obtained final course grade. When we entered the new variables, delay of gratification was no longer a significant predictor. Rating of the course was the only significant predictor of rating of the instructor ($\beta = .64$, $p < .001$) and added a further 38% to the variance ($R^2 = .47$).

In the third regression analysis, final course grade was the dependent variable. In the first step, we entered delay of gratification, interest, importance, and utility as the predictors. Academic delay of gratification ($\beta = .41$, $p < .01$) was a positive predictor of final course grade while interest on the delay alternatives was a negative predictor ($\beta = -.29$, $p < .05$). The R^2 value associated with these variables was .19. In the second step, we added rating of the instructor and the course, and the expected course grade. Academic delay of gratification ($\beta = .21$, $p < .05$) and expected course grade were the only significant predictors of final course grade ($\beta = .77$, $p < .001$). It added a further 57% to the variance ($R^2 = .76$).

Discussion

Adopting a social cognitive approach (Bandura, 1997; Mischel, 1996; Zimmerman, 2000), for self-regulation of learning, in the present study, we examined the association between academic delay of gratification and students rating of teachers and course effectiveness. We also sought to investigate which students' motivational tendencies and teachers and classroom's characteristics serve to clarify those associations. Academic delay of gratification, conceptualized here as a self-regulatory strategy, appears to help students to orchestrate their academic progress, enactment of goals, task completion, and eventually reaching academic achievement.

In the present study, we found partial support for our theoretical contentions. We found that academic delay of gratification was a positive and significant correlated to students rating of the course and teaching effectiveness. We also found that academic delay of gratification was a significant predictor of students rating of the instructors.

Delay was a marginal predictor of students rating of course effectiveness, with the sample of 79 students. Delay of gratification was a significant and positive predictor of the students' final course grade, that is the case even when we controlled for the effect of rating of the instructor and rating of the course. Thus, academic delay of gratification explains an important amount of variance in our understanding the factors that determine course and instructors evaluation.

We framed these associations in the context of William James' (1980) call to teachers. James asked teachers to put their students in such a state of interest on academic task that they would be willing to banish any distraction from their mind. We argued that this call contains a process in which both, the teachers and the students get involved in the learning process so that the students could become active learners and motivationally and behaviorally architecturers of their knowledge and academic repertoire. We suggested that responding to James' call and to contemporary instructional demands could be framed under the umbrella of Zimmerman's cyclical model of self-regulation.

These results are consistent with the notion that students who are willing to delay gratification are task-focused and would avoid any distracting factor that could detract them from task completion. It is in this way in which students with high tendencies to delay gratification could activate their volitional strategies to overcome even classroom's distracting situations and even avoiding distraction derived from lack of instructors' skills or teaching effectiveness. In this way, these learners, by cognitively and volitionally focusing their attention on task could eventually perceive that in fact the course and the teachers are effective even in the absence of supporting evidence.

The present study represents an initial step toward understanding the mechanisms that are associates with students' tendency to delay gratification and their perception of teacher effectiveness. In this initial step, we saw that the association between teachers and students characteristics is not only circumscribed or determined by the teachers' role of imparting knowledge, but also by learners' ability to control their volition and engagement in self-regulation of behavior to secure mastering of class material and task completion. We hope that future research would explore further the points addressed in this study. In particular more work is needed in order to confirm the association between students delay of gratification tendencies and their perception of teaching and course effectiveness.

At the same time, seconding Brodie (1998) we argue that "higher evaluations do not indicate that a professor is an effective teacher. Sometimes, a professor with the highest student evaluation may generate the least studying and produce the least learning" (p. 17). Similarly, Greenwald and Gillmore (1997) found in a study examining course workload and students ratings of instructors that courses with higher grades were more liked by the students, but paradoxically, those courses required less workload. That is why it is important to consider all the factors that may influence the ratings. We proposed that students' willingness to delay of gratification is an essential factor that determines student ratings. Examining that association would be important because it would imply that students ratings reflect students' level of learning and among of workload since we assume that the students high in delay of gratification tend to be those who put more effort into their tasks, do most of the homework, sacrifice immediate gratification to attend academic demands, and because they obtain higher grades.

Although in our discussion we have focused on the cognitive, motivational, and behavioral components surrounding the relation between students' rating of teachers and course effectiveness, we realized that these evaluations encompassed and are determined also by many other variables. As Nerger, Viney, and Riedel put is "evaluation of instruction is a highly complicated, but worthy activity" (p. 231). As they also reported, teaching effectiveness depends of the "class size, shape of the classroom, field of study, expressiveness of the instructor, students grade expectations, and "warmth" of the instructor. In other words, course variables and student and instructor variables can affect student ratings" (p. 218). Other variables that influence this association are seating position, class level, other courses taken during the semester, gender, and previous grade. Given that students ratings depend on the cyclical interaction between the individualized approach used by the instructors, the classroom conditions, and the students' individual differences, it is important that future research would examine these associations that are not yet fully investigated.

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Table 1
Pearson Correlations among the Variables (N = 113)

	1	2	3	4	5
1. Rating of the instructor	-				
2. Rating of the course	.72	-			
3. Academic delay of gratification	.21	.23	-		
4. Expected course grade	.33	.33	.17	-	
5. Final Course grade	.35	35	.34	.87	-

Note: Correlations greater than .19 are significant at $p < .05$).

Table 2
Pearson Correlations among the Variables

	1	2	3	4	5	6	7	8	9
1. Rating of the instructor									
2. Rating of the course	.68								
3. Academic delay of gratification	.12	.21							
4. Interest	-.14	-.05	.37						
5. Importance	.14	.28	.50	.29					
6. Utility	.04	.06	.42	.24	.66				
7. Expected course grade	.29	.35	.19	-.13	.20	.07			
8. Final course grade	.24	.32	.34	-.15	.24	.17	.85		
9. Age	-.04	-.03	.29	.10	.09	.21	.17	.27	
Mean	3.69	3.56	3.01	-0.61	1.45	1.69	8.81	8.33	23.76
Standard Deviation	0.73	0.75	0.49	1.39	0.81	0.81	2.29	2.72	5.22

Note: Correlations greater than .22 are significant at $p < .05$ ($N = 79$).

Table 3
Hierarchical Regression Analysis (Beta Values) Predicting Four Academic Questions (N = 79)

	Course Evaluation		Instructor Evaluation		Final Grade	
Dependent Valuable	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Academic delay of gratification	.28	.04	.31*	.12	.41**	.21*
Interest	-.16	.02	-.23	-.12	-.29*	-.12
Importance	.23	.22	-.02	-.17	.13	.02
Utility	-.16	-.15	.01	.13	-.14	.01
Expected course grade		.05		.08		.77***
Final course grade		.11		-.01		
Rating of the instructor		.59***				-.01
Rating of the course				.64***		.05
R^2	.13	.51	.10	.47	.19	.76
Change in R^2		.38***		.38***		.57***

Note: * $p < .05$. ** $p < .01$. *** $p < .001$.

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APPENDIX A

Sample-Item Assessing Academic Delay of Gratification (ADOG) with Interest, Importance, and Utility for Success Given Preference for Immediate versus Delayed Alternatives

Situation 1

Suppose that you had a choice between…

A. Going to a favorite concert, play, or sporting event and studying less even though it may mean getting a lower grade on an exam the next day, **OR**
B. Staying home and studying to increase your chances of getting a high grade.

Which would you probably choose to do?
_Definitely choose A _Probably choose A _Probably choose B _Definitely choose B

- How much would you **like** to go to a favorite concert, play, or sporting event?
  Not at all 0 1 2 3 4 5 Very Much

- How much would you **like** to stay home and study?
  Not at all 0 1 2 3 4 5 Very Much

- How **important** would it be for you to go to a favorite concert, play, or sporting event?
  Not at all 0 1 2 3 4 5 Very Much

- How **important** would it be for you to stay home and study?
  Not at all 0 1 2 3 4 5 Very Much

- How **likely** is it that you would get a high grade on the exam if you went to the concert, play, or sporting event?
  Not at all 0 1 2 3 4 5 Very Much

- How **likely** is it that you would get a high grade on the exam if you stayed home to study?
  Not at all 0 1 2 3 4 5 Very Much

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APPENDIX B
Items Assessing Teaching and Course Effectiveness

Rating of the Instructor

- What is your overall rating of the teaching effectiveness of the instructor of this course?

  _a. Much above average _b. Above average _c. Average _d. Below average _e. Much below average

Rating of the Course

- What is your overall rating of this course?

  _a. Much above average _b. Above average _c. Average _d. Below average _e. Much below average